

S. M. SAIYAD, IFS
MEMBER SECRETARY
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(f)/1133/2018

Date: 30 Oct 2018

By R P A D

Time Limit

Sub: Environment Clearance to M/s. Meghaaariika Enterprises Pvt Ltd, for setting up of Synthetic Organic Chemicals manufacturing plant at Plot. No. D3/11, Gidc, Dahej-III, Tal: Vagra, Dist: Bharuch. In Category 5(f) of Schedule annexed with EIA Notification dated 14/09/2006.

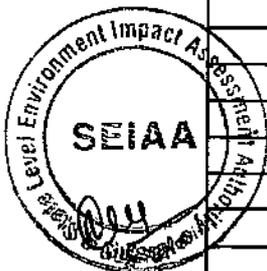
Ref: Your Proposal No. SIA/GJ/IND2/10865/2016.

Dear Sir,

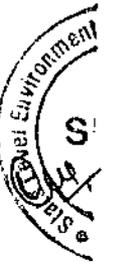
This has reference to your application along with EIA report dated 20/03/2018 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 28/06/2018 to the SEAC.

The proposal is for Environmental Clearance to M/s. Meghaaariika Enterprises Pvt Ltd, for setting up of Synthetic Organic Chemicals manufacturing plant at Plot. No. D3/11, Gidc, Dahej-III, Tal: Vagra, Dist: Bharuch. It is a proposed unit for manufacturing following products, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:

Sr. No	Product	CAS No.	MT/Month	End Use
1.0 Ester Plasticizers				
1	Phthalate Plasticizers	29 17*	16,500	PVC compound for manufacturing films, cables, Plastic, Rubber industries Shoe Soles, leather Cloth, Paints adhesives, binder, softner etc.
	Di-n-butyl phthalate	84-74-2		
	Diisobutyl phthalate	84-69-5		
	Diisohexyl phthalate	146-50-9		
	Di-n-hexyl phthalate	84-75-3		
	Butyl decyl phthalate	89-19-0		
	Diisoheptyl phthalate	41451-28-9		
	Di(2-ethylhexyl) phthalate	117-81-7		
	Diisooctyl phthalate	27554-26-3		
	Di(n-octyl) phthalate	117-84-0		
	Diisononyl phthalate	28553-12-0		
	Di Methyl Phthalate	131-11-3		
	Di Ethyl Phthalate	84-66-2		
	n-Octyl n-decyl phthalate	119-07-3		
	Diisodecyl phthalate	26761-40-0		
	Butyl decyl phthalate	89-19-0		
	Di(2-propylheptyl) phthalate	53306-54-0		
	Diisoundecyl phthalate	85507-79-5		
	Diundecyl phthalate	3648-20-2		
	Undecyl dodecyl phthalate	68515-47-9		
	Ditridecyl phthalate	119-06-2		
	Butyl Nonyl Phthalate	3461-31-2		
	Dialkyl Phthalate	2917 39 90*		
	Dialkylorthophthalate	2917 34 00*		
	Di-trimethylheptyl phthalate	14103-61-8		
	Di-dodecyl Phthalate	2432-90-8		
	Butyl dodecyl phthalate	23761-34-4		
	IsododecylOctyl Phthalate	2917 39 90*		
	OctylHeptyl phthalate	2917 39 90*		
	IsoOctylHeptyl Phthalate	2917 39 90*		



	Di-PentylPhthalate	131-18-00
	PentylNonyl Phthalate	2917 39 90*
	Phthalate softner	29 1 7*
2	Maleate Plasticizers	2917 39 90*
	Di-n-butyl Maleate	105-76-0
	Diisobutyl Maleate	14234-82-3
	Diisohexyl Maleate	-----
	Di-bismethylbutyl Maleate	105-52-2
	Diisoheptyl Maleate	-----
	Di(2-ethylhexyl) Maleate	142-16-5
	Diisooctyl Maleate	-----
	Di(n-octyl) Maleate	2915-53-9
	Diisononyl Maleate	53817-54-2
	Di Methyl Maleate	624-48-6
	Di Ethyl Maleate	141-05-9
	Diisodecyl Maleate	53817-61-1
	Di(2-propylheptyl) Maleate	53306-54-0
	Dialkyl Maleate	2917 39 90*
	Di-Pentyl Maleate	10099-71-5
	Maleate softner	29 1 7*
3	Adipate Plasticizers	2917 12 00*
	Di-n-butyl Adipate	105-99-7
	DiisobutylAdipate	141-04-8
	Di-n-hexyl Adipate	110-33-8
	Di(2-ethylhexyl) Adipate	103-23-1
	DiisooctylAdipate	123-79-5
	Di(n-octyl) Adipate	123-79-5
	DiisononylAdipate	33703-08-1
	Di Methyl Adipate	627-93-0
	Di Ethyl Adipate	141-28-6
	n-Octyl n-decylAdipate	119-07-3
	DiisodecylAdipate	27178-16-1
	Di(2-propylheptyl) Adipate	53306-54-0
	DialkylAdipate	2917 12 00*
4	Stearate Plasticizers	29 15 70*
	n-butyl Stearate	123-95-5
	isobutyl Stearate	646-13-9
	DoDecyl Stearate	5303-25-3
	(2-ethylhexyl) Stearate	22047-49-0
	isooctyl Stearate	40550-16-1
	(n-octyl) Stearate	109-36-4
	isononyl Stearate	30500-51-7
	n-decyl Stearate	32509-55-0
	isodecyl Stearate	31565-38-5
	methyl Stearate	112-61-8
	ethyl Stearate	111-61-5
	alkyl Stearate	29 15 70*
5	Terphthalate Plasticizers	29 17 39*
	Di-n-butyl Terephthalate	1962-75-0
	Butyl decyl Terephthalate	89-19-0
	Di(2-ethylhexyl) Terephthalate	6422-86-2
	Di(n-octyl) Terephthalate	4654-26-6
	Di Isononyl Terephthalate	29 17 39*
	Dialkyl Terephthalate	29 17 39*





6	Citrate Plasticizers	2918 15 *		
	Tri-n-butyl Citrate	77-94-1		
	TriPropyl Citrate	1587-21-9		
	Tri-n-hexyl Citrate	16544-70-0		
	Tri(2-ethylhexyl) Citrate	7147-34-4		
	Trimethyl Citrate	1587-20-8		
	Triethyl Citrate	77-93-0		
	Trialkyl Citrate	29 18 15*		
7	Acetyl Plasticizers	2918 15 90*		
	Acetyl Tributyl Citrate	77-90-7		
	Acetyl Alkyl esters	2918 15 90*		
8	Acetate Plasticizers	29 15 3*		
	Methyl acetate	79-20-9		
	Ethyl acetate	141-78-6		
	Propyl acetate	109-60-4		
	Butyl Acetate	123-86-4		
	Dialkyl acetate	29 15 3*		
9	Sebacate Plasticizers	291 73 00*		
	Didecyl Sebacate	2432-89-5		
	Diisodecyl sebacate	28473-19-0		
	Diisononyl sebacate	---		
	Di-(2ethyl hexyl) sebacate	122-62-3		
	Dibutyl sebacate	109-43-3		
	Diethyl sebacate	110-40-7		
	Dimethyl Sebacate	106-79-6		
	Dialkyl Sebacate	291 73 00*		
10	Trimellitate Plasticizers	2917 39 90*		
	Trioctyl Trimellitate	89-04-3		
	Tri (2 Ethyl hexyl) Trimellitate	3319-31-1		
	Tri IsoNonyl Trimellitate	53894-23-8		
	Trialkyl Trimellitate	2917 39 90*		
	Tri Isodecyl Trimellitate	36631-30-8		
11	Benzoate Plasticizers	29 16 31*		
	Ethyl Benzoate	93-89-0		
	Benzyl benzoate	120-51-4		
	octyl benzoate	94-50-8		
	Isononyl Benzoates	670241-72-2		
	Alkyl Benzoate	29 16 31*		
12	Cyclo Hexane Plasticizers	2917 39 90*		
	Di-2 ethylhexyl/cyclohexanoate	2917 39 90*		
	Di-isononylcyclohexanoate	474919-59-0 166412-78-8		
	Di alkyl cyclohexanoate	2917 39 90*		
2.0 Transesters Plasticizers				
	Fatty Acid alkyl esters	3826 00 00*	8,250	PVC compound for manufacturing films, cables, Plastic, Rubber industries Shoe Soles, leather Cloth, Paints adhesives binder, softener etc.
	Fatty Acid methyl ester	67762-38-3		
	Fatty Acid Butyl ester	8047-75-4		
	Fatty Acid octyl ester	3812 20 10*		
	Fatty Acid Isononyl ester	946-822-1		
	Epoxydised Fatty acid alkyl esters	3812 20 10*		
	Epoxydised Soya Methyl ester	68082-35-9		
3.0 Ether esters Plasticizers				
1	Glycol Ether Esters		687.5	

	Glycol Benzene ether ester	----		
4.0 Epoxy Plasticizers				
1	Epoxidised vegetable oils	15 1 8*	1,375	
	Epoxidised Soybean oil	8013-07-8		
2	Epoxidised chlorinated plasticizers	-----		
	Epoxidised Chlorinated Soybean oil	15 1 8*		
3	Epoxidised Ester	3812 20 10*		
	Epoxidised Soya Methyl ester	68082-35-9		
	Epoxydised Soya Butyl ester	3812 20 10*		
	Epoxydised Soya Octyl ester	68082-34-8		
	Epoxydised Soya Isononyl ester	3812 20 10*		
	Epoxydised Fatty acid alkyl esters	3812 20 10*		
5.0 Alkyl Pyrrolidone				
	Alkyl Pyrrolidone	29 3 3*	687.5	
	1-octyl 2-Pyrrolidone	2687-94-7		
	1-BUTYL-2-PYRROLIDINONE	3470-98-2		
	IsononylPyrrolidone	29 3 3*		
	Total		27,500	

The project activity is covered in 5(f) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 05/10/2018 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 18/07/2018. The proposal was considered by SEIAA, Gujarat in its meeting held on 22/10/2018 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A. CONDITIONS :

A. 1 SPECIFIC CONDITION :

1. Generation of Alcohol/Polyols from the manufacturing process of Trans-ester Plasticizer shall not exceed 900 MT/Month. Unit shall be reuse 170.5 MT/Month for captive consumption and remaining 729.5 MT/Month shall be sent to authorize end users having permission of Rule 9 under the HW Rule 2016.
2. Generation of Organic Acid/Fetty Acid from the manufacturing process of Trans-ester Plasticizer shall not exceed 250 MT/Month. Unit shall be reuse 125 MT/Month for captive consumption and remaining 125 MT/Month shall be sent to authorize end users having permission of Rule 9 under the HW Rule 2016.
3. Entire quantity of Inorganic salt (355 MT/Month), Process Waste (500 Kg/Year), Evaporaion Salt (60 MT/Month) and ETP Sludge (2 MT/Month) shall be sent to active TSDF Site.
4. Entire quantity of solvent residue (1 MT/Month) generated from Stripper shall be reuse entirely in manufacturing process or send to co-processing unit or sent to CHWIF.
5. Entire quantity of plasticizing carbon cake (80 MT/Month) generated from manufacturing process of Ester Plasticizer, Epoxy Plasticizer, Tras-Ester Plasticizer and Ether Ester Plasticizer shall be sent to authorize end users having permission of Rule 9 under the HW Rule 2016.
6. Complete Zero-Liquid Discharge [ZLD] status shall be maintained all the time and there shall be no drainage connection from the premises.
7. All measures shall be taken to prevent soil and ground water contamination.
8. Leak Detection and Repair (LDAR) program shall be prepared and implemented as per the CPCB guidelines.

A. 2 WATER :

9. Total water requirement for the project shall not exceed 448 KLD. Unit shall recycle 174 KLD for cooling tower. Hence, fresh water consumption shall not exceed 274 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
10. The industrial effluent generation from the project shall not exceed 39 KLD.
11. Industrial waste water shall be treated in ETP having primary treatment (Cap. 50 KLD).
12. Treated wastewater from ETP shall be subjected to stripper followed by MEE & ATFD (Cap. 45 KLD) within the premises.
13. Boiler Blow Down (2 KLD), Process condensate (145 KLD) and condensate from Evaporator system (27 KLD) shall be

reused for cooling purpose within plant premises only.

14. Domestic wastewater generation shall not exceed 10 KL/day and it shall be discharged in Septic Tank and Soak pit.
15. Unit shall provide adequate ETP with stripper, MEE and ATFD system to achieve Zero Liquid Discharge [ZLD] by reusing treated waste water completely.
16. The unit shall provide metering facility at the inlet and outlet of the ETP, MEE, ATFD and maintain records for the same.
17. Proper logbooks of ETP, MEE, ATFD, Chemical consumption, power consumption, reuse etc. shall be maintained and shall be furnished to the GPCB from time to time.

A. 3 AIR:

18. Unit shall not exceed fuel consumption for Steam Boiler, Thermo pack and stand-by DG set as mentioned below:

SR. no.	Source of emission With Capacity	Stack Height (meter)	Stack Diameter (meter)	Type of Fuel	Quantity of Fuel MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
1	Steam Boiler-1 (5 TPH)	35	0.8	Imported Coal	146	SPM SO ₂ NO _x	Cyclone separator & Bag Filter
2	Steam Boiler-2 (5 TPH)						Cyclone separator & Bag Filter
3	Steam Boiler-3 (5 TPH)	35	0.8				Cyclone separator & Bag Filter
4	Steam Boiler-4 (5 TPH)						Cyclone separator & Bag Filter
5	Thermopack -1 (50 lac Kcal)	45	1.0				Cyclone separator & Bag Filter
6	Thermopack -2 (50 lac Kcal)						Cyclone separator & Bag Filter
7	Thermopack -3 (50 lac Kcal)	45	1.0				Cyclone separator & Bag Filter
8	Thermopack -4 (50 lac Kcal)						Cyclone separator & Bag Filter
9	Thermopack -5 (50 lac Kcal)	45	1.0				Cyclone separator & Bag Filter
10	Thermopack -6 (50 lac Kcal)						Cyclone separator & Bag Filter
11	Thermopack -7 (50 lac Kcal)	45	1.0	Cyclone separator & Bag Filter			
12	Thermopack -8 (50 lac Kcal)			Cyclone separator & Bag Filter			
13	DG Set-1 1000 KVA (Stand by)	11	0.3	Diesel	1000 Lit/Hr		Adequate stack height
14	DG Set-2 1000 KVA (Stand by)	11	0.3				Adequate stack height
15	DG Set-3 1000 KVA (Stand by)	11	0.3				Adequate stack height

19. Unit shall provide adequate APCM with flue gas generation sources as mentioned above:
20. There shall be no any process gas emission.
21. The fugitive emission in the workzone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.
 - > Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
 - > Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
 - > A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.
22. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
23. For control of fugitive emission, VOCs, following steps shall be followed :
 - a. Closed handling and charging system shall be provided for chemicals.
 - b. Reflux condenser shall be provided over Reactors / Vessels.
 - c. Pumps shall be provided with mechanical seals to prevent leakages.
24. Airborne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosures.
25. Regular monitoring of groundlevel concentration of PM10, PM2.5, SO₂, NO_x, and VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by

the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

A. 4 SOLID / HAZARDOUS WASTE:

26. All the hazardous waste management shall be taken care as mentioned below:

SR. NO.	NAME OF WASTE	SOURCE	WASTE CATEGORY	TOTAL QTY.	MODE OF DISPOSAL
1	Used/ Spent oil	Equipments & Machineries	SCH-I/5.1	1500 Lit./Year	Collection, Storage, Transportation and sale to re-processors
2	Discarded Drums, Bags & Liners	Raw Material Storage	SCH-I/33.1	200 Nos./ Month 50,000 Nos./ Month	Collection, Storage, Transportation and sale to registered recyclers
3	Alcohol/ Polyols	Process -Trans-ester Plasticizer	SCH-II/B5	900 MT/ Month	Captive consumption 170.5 MT/Month and 729.5 MT/Month collection, Storage, Transportation & will be sent to end users Authorized under Rule-9
4	Organic Acids/ Fatty Acids	Process -Trans-ester Plasticizer	SCH-II/B5	250 MT/ Month	Captive consumption 125.0 MT/Month and 125.0 MT/Month Collection, Storage, Transportation & will be sent to end users Authorized under Rule-9
5	Inorganic Salt	Process -Trans-ester Plasticizer -Ether Ester Plasticizer	SCH-I/35.3	355 MT/Month	Collection, Storage, Transportation will be sent to end user or TSDF.
6	Plasticizing Carbon Cake	Process -Ester Plasticizer -Epoxy Plasticizer -Trans-ester Plasticizer -Ether Ester Plasticizer	SCH-I/22.2	80 MT/Month	Collection, Storage, Transportation will be sent to end users Authorized under Rule-9
7	Process Waste (Filter cloth/ Insulation waste/ Other)	Filtration / process	SCH-I/22.2	500 kg/Year	Collection, Storage, Transportation and Disposal at nearest TSDF site
8	Evaporation Salt	MEE & ATFD	SCH-I/35.3	60 MT/Month	Collection, Storage, Transportation and Disposal at nearest TSDF site.
9	ETP Sludge	ETP	SCH-I/34.2	2.0 MT/Month	Collection, Storage, Transportation and Disposal at nearest TSDF site.
10	Solvent Residue from Stripper	Solvent stripper prior to MEE	SCH-I/36.1	1.0 MT/Month	Collection, Storage, Transportation and reuse in manufacturing process or send to cement industry for co processing or send to CHWIF for Incineration.

27. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

A. 5 OTHER:

28. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Aqua Air Environmental Engineers Pvt. Ltd., Surat and submitted by project proponent vide letter no. NIL dated 20/03/2018, reply of ADS submitted vide letter dated 28/06/2018 and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.

B. GENERAL CONDITIONS:

B.1 CONSTRUCTION PHASE:

29. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
30. Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.
31. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
32. First Aid Box shall be made readily available in adequate quantity at all the times.
33. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local by-laws of concern authority shall be complied in letter and spirit.
34. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
35. Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
36. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
37. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site.
38. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.
39. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete [RMC] and lead free paints in the project.
40. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.

B.2 OPERATION PHASE:

B.2.1 WATER:

41. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
42. All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.

B.2.2 AIR:

43. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
44. Acoustic enclosure shall be provided to the DG sets (if applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
45. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
46. Flue gas emission & Process gas emission (if any) shall conform to the standards prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.
47. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

B.2.3 HAZARDOUS/SOLID WASTE:

48. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
49. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
50. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)
51. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
52. The design of the Trucks/tankers shall be such that there is no spillage during transportation

53. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
54. Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

B.2.4 SAFETY:

55. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
56. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
57. Main entry and exit shall be separate and clearly marked in the facility.
58. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
59. Storage of flammable chemicals shall be sufficiently away from the production area.
60. Sufficient number of fire extinguishers shall be provided near the plant and storage area.
61. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
62. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
63. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
64. Only flame proof electrical fittings shall be provided in the plant premises.
65. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
66. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
67. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
68. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
69. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
70. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
71. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
72. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
73. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
74. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
75. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.

B.2.5 NOISE:

76. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

B.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION:

77. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
78. The company shall undertake various waste minimization measures such as :
- Metering and control of quantities of active ingredients to minimize waste.
 - Reuse of by-products from the process as raw materials or as raw materials substitutes.
 - Use of automated and close filling to minimize spillages.
 - Use of close feed system into batch reactors.

- e. Venting equipment through vapour recovery system.
- f. Use of high pressure hoses for cleaning to reduce wastewater generation.
- g. Recycling of washes to subsequent batches.
- h. Recycling of steam condensate.
- i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation.
- j. Regular preventive maintenance for avoiding leakage, spillage etc.

B.2.7 GREEN BELT AND OTHER PLANTATION:

79. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
80. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

B.3 OTHER CONDITION:

81. The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
82. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
83. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.
84. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
85. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
86. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
87. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
88. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
89. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
90. During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
91. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
92. Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.
93. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
94. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
95. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
96. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
97. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
98. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that



- the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
99. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
100. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
101. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
102. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
103. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
104. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
105. This environmental clearance is valid for seven years from the date of issue.
106. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
107. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,
Yours sincerely,


(S. M. SAIYAD)
Member Secretary



Issued to:
M/s. Meghaaarika Enterprises Pvt Ltd,
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New Delhi- 110025